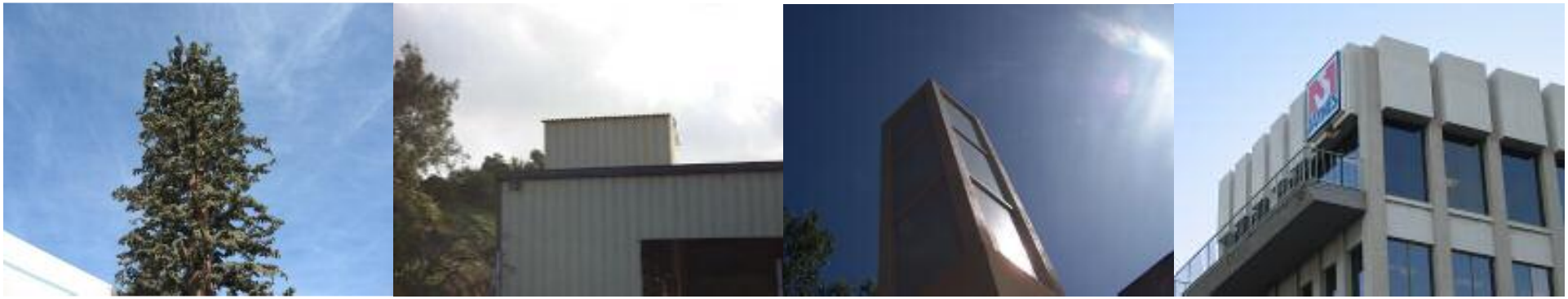

# Wireless Communication Facility Guidelines



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America's Finest City
THE CITY OF SAN DIEGO

# INTEGRATE BLEND STEALTH CAMOUFLAGE

## Introduction

**The following guidelines should be used in conjunction with the Wireless Communication Facilities regulations of the Land Development Code (section 141.0420), as well as any previous applicable regulations. These guidelines will be used as a tool for processing all new and expired permits and as minimum standards in determining the review time. Together with Council Policy 600-43, these guidelines prescribe clear, reasonable, and predictable criteria to assess and process applications in a consistent and expeditious manner.**

**Compliance with these guidelines will result in an accelerated review. Wireless proposals that do not comply with these guidelines will be subject to standard review timelines and may be recommended for denial to the decision maker.**

**Design Guideline Objectives**:

1. Provide a uniform and comprehensive set of guidelines for the design and review of wireless communication facilities.

2. Recognize that wireless communication facilities are necessary and vital for the communication needs of the residents, businesses, visitors and government of San Diego.

3. Ensure that all wireless communication facilities employ stealth design techniques.

4. Ensure that all wireless communication facilities minimize visual impacts on communities, neighborhoods, vistas and natural resources.

5. Promote consistent evaluation and uniform application of standards.

6. Applicable to all new wireless communication facility applications, including facilities that have expired and are required to apply for a new permit consistent with the regulations in effect at the time of application.

7. As of February 1, 2007, ministerial and discretionary projects that completely conceal all components of the wireless facility will not be subject to an expiration date.

8. Existing expired monopoles will be permitted to remain as-is until June 1, 2007 at which time a replacement facility must be approved and constructed in its place. Failure to remove the tower will result in assignment of the case to Neighborhood Code Compliance, which may include legal action.

# BUILDING COLLOCATIONS

Complete Concealment – Additions or modifications to buildings of this nature should always consider the existing bulk, scale, symmetry and design of the building.

A. Use of existing building elements by proposing antennas behind existing building features such as a penthouse or parapet if available and existing building construction allows; or

B. Addition of architectural features to building that allows placement of antenna behind or within structure.

1. Any façade replacements with Fiberglass Reinforced Plastic (FRP) screening (or similar) shall match the building exterior on which it is proposed. Figure 1-3.

2. Additions must be architecturally compatible with existing building and not create unnecessary bulk or create a visual impact.

3. Colors and textures must match existing building. Figure 1-3.

4. No visible transitions between old and new surfaces. Figure 4 is an example of design with poor transitioning.

5. No exposed construction braces. See Figure 5 for inappropriate rooftop addition with exposed construction braces.

6. Roof top additions must include four sides concealed on all 4 sides. See figure 6.

7. New architectural features such as columns, pilasters, corbels or other ornamentation that conceal antennas may be used if it complements the architecture of the existing building. See figure 7-8.

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8. Faux chimneys must include architectural detail/trim, if such detailed exists on the building, or if it helps to improve the appearance of the building. See figure 9.

C. Modifications to concealed facilities that do not change the exterior appearance will not require review by Development Services.

Façade Mounted Antennas – These types of additions to buildings must consider scale and symmetry of the structure as well as minimizing bulk to the exterior.

*Examples of an appropriate façade mounted antennas on water tanks:*

A. Antennas mounted to the water tank/standpipe façade.

*Examples of inappropriate façade mounted antennas due to exposed cables and mounting brackets:*

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B. Antennas mounted to the façade of a building that are painted and textured to match the building

1. Utilize the smallest mounting brackets available in order to provide the smallest offset from the building. If the brackets are 4” then the space between the building face and the back of the antenna should not exceed 4”.

2. Utilize skirts on sides and bottoms of antennas in order to conceal mounting hardware and minimize the visual impact of the antennas. See Figures 10-11.

3. Paint and texture antennas the same as the building surface. See Figures 10-11.

4. To the extent possible, employ symmetry and balance techniques for all façade mounted antennas.

- First provider on a structure will dictate antenna length, width and placement. All succeeding applications for façade mounts will be required to ensure consistency and symmetry in placing antennas on the exterior of the structure.

- No interruption of horizontal or vertical reveals.

5. Antennas should be no longer nor wider than the façade on which they are proposed.

6. No exposed cabling shall be permitted. See Figures 12 and 13. All exterior installed cables must be located within a cable tray, painted and textured to match the building.

7. No exposed mounting apparatus. See Figure 13.

8. No exposed pipes absent antennas. See Figure 13.

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# GROUND MOUNTED FACILITIES

This category includes flag poles, faux trees, towers, ball field lights, light poles, pipe mounts, and public right-of-way elements.

1. Comply with all development regulations for zone.

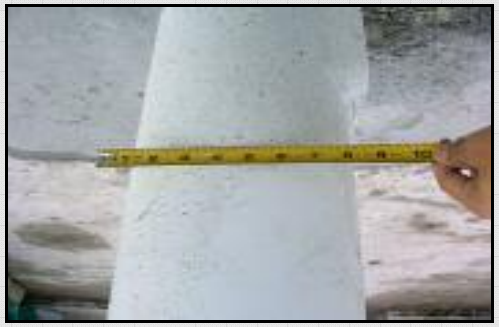
2. Design structures to the minimum height necessary, but apply for Planned Development Permit when height deviation is needed. Height deviations will be considered in exchange for a well designed, integrated project.

3. Structures need to be integrated architecturally into environment and harmonize with the property on which it is proposed.

4. Community Planning Group support of existing monopoles does not negate the need to comply with regulations.

   a. <u>Flagpoles</u>

      1. Poles 30'-0" or less shall not exceed 9 inches in diameter.



      2. Consideration will be given to poles higher than 30'-0" that exceed the 9 inch diameter limitation if it can be demonstrated that the flag pole is located in a suitable environment <u>and</u> appropriately tapered in order to maintain the appearance of an authentic flag pole.

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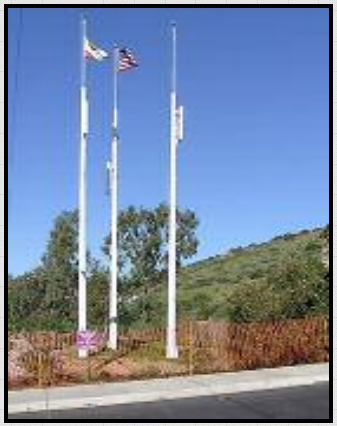

# Tree Specifications

a. Official manufacturer specifications and photos

b. Distance the branches extend from the antenna face

c. Branch count

d. Overall branch density (minimum 2.5 per ft., measured from start of branches to top of tree)

e. Beginning branch height

f. Overall tree height and overall pole height

g. Materials

h. Cabling of the antenna (no overhead cabling)

i. Sock details

j. Color specifications

k. Leaf detail (proposed leaf should be similar to surrounding mature or proposed tree species)

l. Type of brackets

3. Antennas must be enclosed within pole/radome. Please see Figure 16 for an appropriate design for a flag pole. All antennas should be concealed unlike Figure 17 where the antennas are exposed.

4. Comply with US Flag Code. Figure 16 illustrates a pole with a non-proportional flag.

5. Utilize in conjunction with existing or added formal plantings.

6. Decorative ornaments shall be included in the overall height measurement.

7. All coax must be routed directly from the ground up through the pole. No doghouse will be allowed.

b. <u>Faux Trees</u>

1. Use in an existing landscape setting with trees at similar height and of the same species.

2. If site is void of tall trees or landscape, create landscape setting that integrates faux tree with added similar species of varying heights.

*Examples of <u>appropriate</u> faux tree:*

3. Faux trees in non urban settings should be species regionally appropriate to San Diego that blends with established plant communities. Figure 18 illustrates an ideal tree location with appropriate existing landscaping with trees at similar heights.

4. Utilize trees that replicate shape, structure and color of live trees. Figure 19 illustrates only examples of trees staff would approve and does not take into account the tree settings.

5. Provide detailed specifications during plan review. (See Page 8)

6. Ensure that top branches of tree do not exceed allowed height. See Figures 20-21.

7. All coax must be routed directly from the ground up through the pole. No doghouse will be allowed. Unlike Figure 22.

c. <u>Ball Field Lights</u>

1. Utilize existing ball field lights, upgrade existing light standards or add ball field lights to a park planned for field lighting. See Figures 23-24.

2. Mount antennas as close as possible to the pole and below the light source.

3. Minimize visibility of coax cables by routing through pole and eliminating loops for cable entry and exit.

4. Paint antennas the same color as the pole.

5. All cables and conduit to and from the light standard is expected to be routed from underneath the caisson. No doghouse will be allowed.

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d. Light Poles

1. Use only in parking lots or along pedestrian paths. Not to be used as a means to gain height in areas where a light standard is unnecessary. See Figures 28.

2. Match design, material and color of existing light poles. See Figures 25-26.

3. Replicate height of existing poles.

4. If utilizing more than one pole, space appropriately throughout property.

5. All cables and conduit to and from the light standard is expected to be routed from underneath the caisson. No doghouse will be allowed. Unlike Figure 29.

e. Pipe Mounts

1. Use in conjunction with backdrop (either hillside or structure) and sufficient landscape to screen antennas. See Figure 27.

2. Add landscape to screen if site is devoid of landscape

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f. Public Right-Of-Way

1. Replacement poles should match height, color and material of original poles.

2. Exterior panel antennas should not exceed the height of the pole. See Figure 30-31.

3. Utilize brackets that allow antennas to be mounted no more than 4" from the pole.

4. No looping cables.

5. All replacement or new poles must comply with all city ordinances and policies.

g. Towers

1. Design towers to architecturally blend with the building/structure/setting in which it is proposed.

2. Utilize the lowest height possible.

3. Be creative, but reasonable. The clock tower at Clairemont Town Square, the faux water tank on Black Mountain Road, Obelisk at 906 47th Street and the tower at Carlsbad, La Costa Towne Center are examples of towers that are in context to the surroundings.

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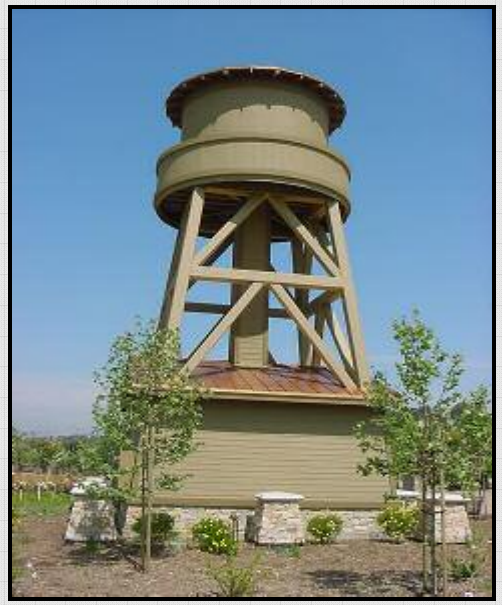
*-Carlsbad La Costa Towne Cente-*

*-Clock tower at Clairemont Town Square-*



*-Faux Water Tank on Black Mountain Road-*

*-City Heights Identification Tower-*

*-Gompers Church, San Diego-*

# ALL WIRELESS COMMUNICATION FACILITIES

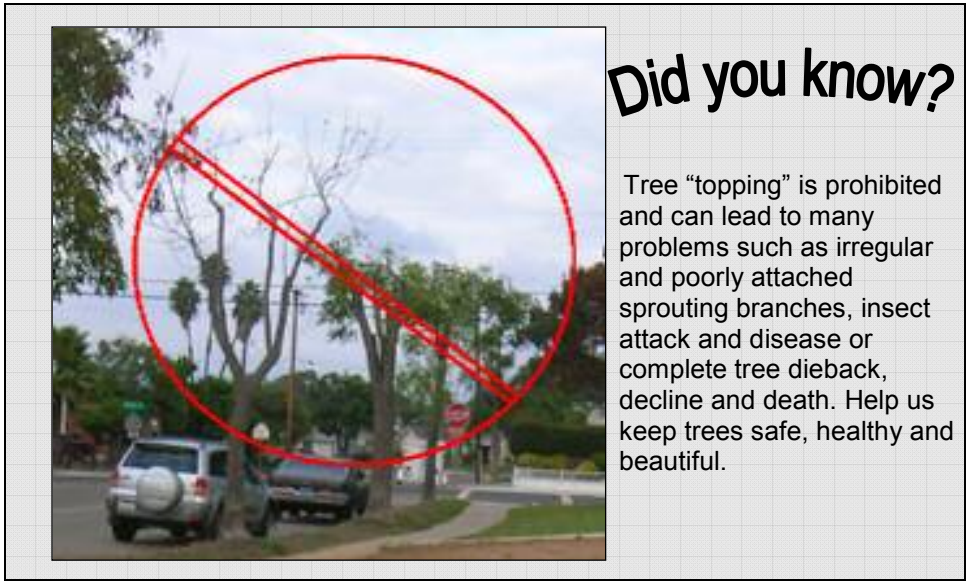
a. Landscape Requirements

1. Utilize landscaping to improve views from the public right-of-way and neighboring properties by screening, buffering, and blending Wireless Communication Facilities with the surrounding environment. All landscaping shall conform to the City's Landscape Regulations and the Land Development Manual: Landscape Standards. Landscape plans submitted to the Development Service's Department shall conform to the Land Development Manual: Project Submittal Requirements."

2. For discretionary projects, provide street trees, per the requirements of LDC 142.0409, Street Tree and Public Right-of-Way Requirements.

3. Landscape screening shall be provided around new exterior equipment enclosures. The plantings shall be evergreen and spaced to ensure 100 percent screening within two years of installation. (Land Development Manual: Landscape Standards, section 1.2)

4. When antennas are proposed to be located on artificial trees (i.e., “monopines”), the proposed artificial tree shall match the leaf shape, tree form and coloring of existing trees and any proposed live trees. Additional trees shall be added to create a grove-like environment.




5. Proposed landscaping shall be consistent with the existing landscape design and applicable permits. Facility design shall not result in the removal of any trees. However, trees may be removed and replaced in-kind.

6. When underground vaults are proposed, they shall be located to minimize disruption to the City's street trees. Adequate planting depth shall be provided between the top of the vault and the finished grade for proposed planting to grow in a healthy growing condition to match adjacent, existing planting. Any vegetation removed shall be replaced in-kind.

7. Any removal, replacement, or installation of street trees shall require review by the City's Urban Forester and the issuance of a 'No-Fee' Street Tree Permit, in accordance with Municipal Code section 62.0600. Care should be taken to not disrupt existing street trees. Any trees removed shall be replaced in-kind.

b. Cable Trays

1. Cable should be routed internally. If it can be demonstrated that the building construction does not allow internal routing, then cable tray must be minimum size necessary to accommodate cable.

2. Cable tray should be located inconspicuously and appropriately unlike Figure 33. Place in a corner of the building where it won't have a visual impact or make the cable tray a decorative element on the building.

3. When more than one cable tray is exposed on a building exterior, place and space consistently and appropriately.

4. All coaxial cable must be placed underground. No above ground cable or bridges.

5. All coax must be routed directly from the ground up through the pole.

6. All exterior mounted cable tray shall be painted and textured to match the existing building. See Figure 32.

c. Enclosures and Equipments

1. Architectural integration required. Notice how Figure 34 uses the same pattern and materials as the existing building.

2. Utilize similar building materials, color, accents and texture as primary building. If no buildings exist on site, ensure that building is designed to blend in to environment.

3. Minimize exterior appurtenances. Use screen wall and/or combination of landscape for screening purposes.

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*Appropriate landscaping for exterior appurtenances:*


4. Utilize open top with lattice accent in order to eliminate need for a/c units. See figure below for an example of the AC units enclosed on the roof of an open top enclosure.

*The AC units are located inside the highlighted area.*

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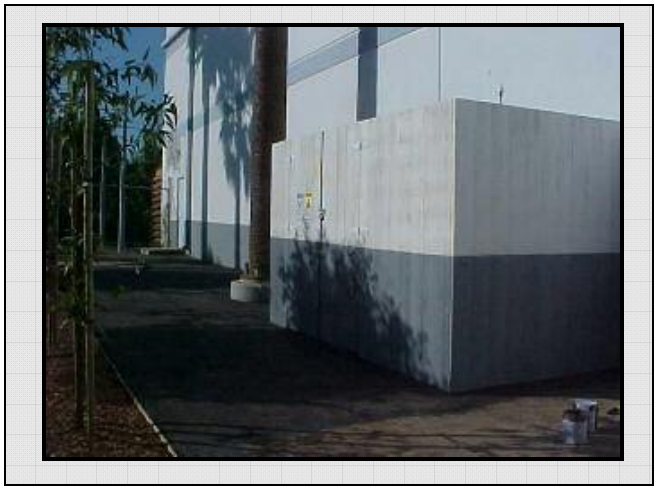
5. Utilize existing topography or landscape to minimize views of equipment.

*<u>Appropriate</u> example of color and texture to match the existing building:*



6. Gates should be constructed of similar or complimentary materials as the enclosure, but must maintain opaque qualities. Expanded metal with pinholes is an example. See Figures 38-40.

7. Fences shall be constructed of decorative materials that complement and blend with the surroundings. No chain link fence will be permitted.

8. Anti-graffiti finish shall be applied to all solid fences, walls and gates.

9. Chapter 14, Article 2, Division 9 of the Land Development Code requires that all roof top equipment be screened. In addition, wireless communication facilities must be architecturally integrated and appropriately placed on the roof top so as not to cause a visual impact. See Figure 41 for an example of a poorly integrated rooftop addition.

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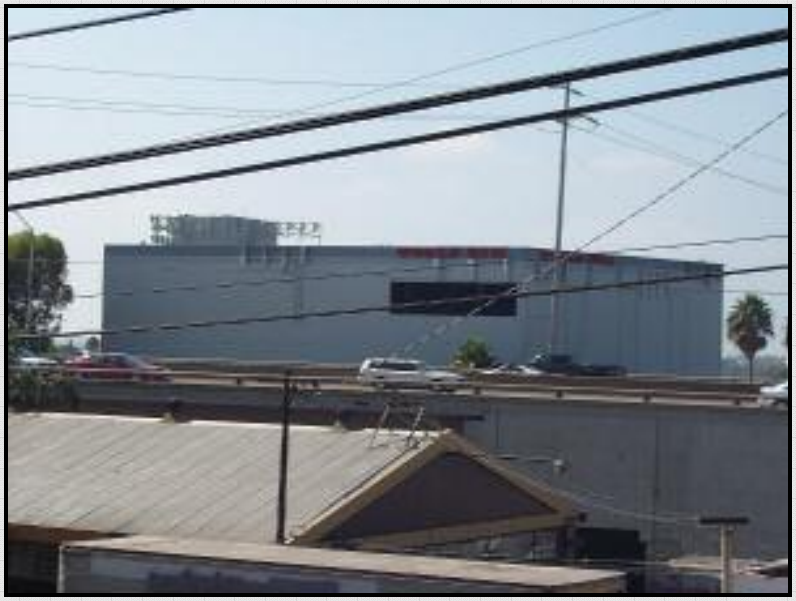

d. Coastal Height

In the Coastal Height Limitation Overlay Zone on previously conforming buildings above 30 feet in height, the carrier must demonstrate that a significant gap in service coverage exists.

For buildings over 30 feet:

1. Antennas must be within the existing structural envelope of building, unless carrier can demonstrate that existing building construction does not allow.

2. Plans must demonstrate that proposal is the least intrusive method of installation in terms of aesthetics and height.

3. Each carrier is responsible for demonstrating that the initial exterior antenna installation on a building and all subsequent installations do not interfere with the overall aesthetics of the building in compliance with the goals and objectives of the Coastal Overlay Zone.

# APPENDIX A

A. Requirement and Resources

1. Council Policy 600-43, City of San Diego
2. Information Bulletin 536, City of San Diego
3. Justification Map